

1. A method for the targeted unidirectional delivery of a therapeutic or diagnostic agent to the eye of a mammal, said method comprising contacting the sclera of said mammal with said therapeutic or diagnostic agent together with means for facilitating the transport of said agent through the sclera.

5  
SUB A2)  
2. A method for the targeted unidirectional delivery of a therapeutic or diagnostic agent to the eye of a mammal, said method comprising contacting the sclera of said mammal with said therapeutic or diagnostic agent, wherein said agent has a molecular weight of at least 70 kDa.

10  
3. The method of claim 2, wherein said therapeutic or diagnostic agent has a molecular weight of at least 100 kDa.

15  
4. The method of claim 3, wherein said therapeutic or diagnostic agent has a molecular weight of at least 120 kDa.

20  
5. A method for the targeted unidirectional delivery of a therapeutic or diagnostic agent to the eye of a mammal, said method comprising contacting the sclera of said mammal with said therapeutic or diagnostic agent, wherein said agent has a molecular radius of at least 0.5 nm.

25  
6. The method of claim 5, wherein said therapeutic or diagnostic agent has a molecular radius of at least 3.2 nm.

7. The method of claim 5, wherein said therapeutic or diagnostic agent

has a molecular radius of at least 6.4 nm.

8. The method of claim 1, 2, or 5, wherein, prior to contacting said sclera with said agent, said sclera is treated to thin it.

9. The method of claim 8, wherein said sclera has a thickness less than 70% of its pre-thinned thickness.

10. The method of claim 9, wherein said sclera has a thickness less than 60% of its pre-thinned thickness.

11. The method of claim 2 or 5, wherein said therapeutic or diagnostic agent is contacted with said sclera together with means for facilitating the transport of said agent through the sclera.

12. The method of claim 1, 2 or 5, wherein said device is an osmotic, mechanical, or solid state transport facilitating device, or a polymer.

13. The method of claim 12, wherein said device is a pump.

14. The method of claim 12, wherein said device comprises a microchip.

15. The method of claim 1, 2, or 5, wherein said mammal is a human.

16. The method of claim 1, 2, or 5, wherein said method is used to treat a retinal or choroidal disease.

17. The method of claim 16, wherein said retinal or choroidal disease is selected from the group consisting of macular degeneration, diabetic retinopathy, retinitis pigmentosa and other retinal degenerations, retinal vein occlusions, sickle cell retinopathy, glaucoma, choroidal neovascularization, retinal neovascularization, retinal edema, retinal, ischemia, proliferative vitreoretinopathy, and retinopathy of prematurity.

18. The method of claim 1, 2, or 5, wherein said therapeutic agent is selected from the group consisting of purified polypeptides, purified nucleic acid molecules, synthetic organic molecules, and naturally occurring organic molecules.

19. The method of claim 19, wherein said polypeptide is an antibody:

20. The method of claim 20, wherein said antibody specifically binds to intercellular adhesion molecule-1.

Add  
A3